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## Wildfire and the Future of Water Supply



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**ON THE COVER:** Wildfires can have devastating effects on aquatic ecosystems and threaten community drinking water supply through impacts on water quantity and quality. Increasing global occurrence of wildfires has created a pressing need for effective adaptation and mitigation strategies to protect critical water supplies originating in forested environments.

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### Wildfire and the Future of Water Supply

Kevin D. Bladon,\* Monica B. Emelko, Uldis Silins, and Micheal Stone

In many parts of the world, forests provide high quality water for domestic, agricultural, industrial, and ecological needs, with water supplies in those regions inextricably linked to forest health. Wildfires have the potential to have devastating effects on aquatic ecosystems and community drinking water supply through impacts on water quantity and quality. In recent decades, a combination of fuel load accumulation, climate change, extensive droughts, and increased human presence in forests have resulted in increases in area burned and wildfire severity—a trend predicted to continue. Thus, the implications of wildfire for many downstream water uses are increasingly concerning, particularly the provision of safe drinking water, which may require additional treatment infrastructure and increased operations and maintenance costs in communities downstream of impacted landscapes. A better understanding of the effects of wildfire on water is needed to develop effective adaptation and mitigation strategies to protect globally critical water supplies originating in forested environments.

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9454  [dx.doi.org/10.1021/es501474y](https://doi.org/10.1021/es501474y)










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**Use of a Free Ocean CO<sub>2</sub> Enrichment (FOCE) System to Evaluate the Effects of Ocean Acidification on the Foraging Behavior of a Deep-Sea Urchin**

James P. Barry,\* Chris Lovera, Kurt R. Buck, Edward T. Peltzer, Josi R. Taylor, Peter Walz, Patrick J. Whaling, and Peter G. Brewer

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**Anti-Fouling Behavior of Hyperbranched Polyglycerol-Grafted Poly(ether sulfone) Hollow Fiber Membranes for Osmotic Power Generation**

Xue Li, Tao Cai, and Tai-Shung Chung\*

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**Environmental Implications of United States Coal Exports: A Comparative Life Cycle Assessment of Future Power System Scenarios**

Barrett Bohnengel, Dalia Patiño-Echeverri,\* and Joule Bergerson

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**A Ten Liter Stacked Microbial Desalination Cell Packed With Mixed Ion-Exchange Resins for Secondary Effluent Desalination**

Kuichang Zuo, Jiaxiang Cai, Shuai Liang, Shijia Wu, Changyong Zhang, Peng Liang,\* and Xia Huang\*

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Christos Aristeides Tsiliyannis\*

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**Branching Ratios in Reactions of OH Radicals with Methylamine, Dimethylamine, and Ethylamine**

Lavinia Onel, Mark Blitz, Matthew Dryden, Lucy Thonger, and Paul Seakins\*

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**Comment on "High Naturally Occurring Radioactivity in Fossil Groundwater from the Middle East"**

Saed Dababneh\*

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## Additions and Corrections

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9958 [dx.doi.org/10.1021/es503808k](https://doi.org/10.1021/es503808k)  
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